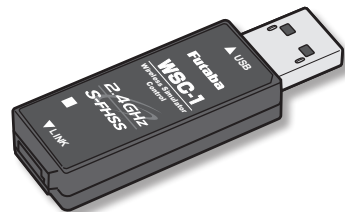


Futaba WSC-1

Wireless Simulator Control



Instruction Manual

* Futaba S-FHSS system does not work with Futaba FASST/FASSTest/T-FHSS system. Futaba FASST/FASSTest/T-FHSS system and S-FHSS system are not compatible to each other.

* Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Thank you for purchasing the WSC-1 Wireless Simulator Control for S-FHSS 2.4GHz System. This WSC-1 is a USB interface that enables the S-FHSS 2.4GHz system Futaba transmitter to be used wirelessly as a controller for Real Flight RF8 / 9 or later. (The S-FHSS 2.4GHz system Futaba transmitter can also be used as a game controller for Windows®.)

WSC-1 Specifications

(Specifications and ratings are subject to change without prior notice accompanying technological developments.)

- Applicable OS: Windows® 10/8.1
- USB connector: USB Series A connector
- Operating voltage: 5.0V ±0.2V (USB bus power)
- Current drain 20mA
- Operating environment: Temperature -10°C+45°C
- Dimensions: 0.716 x 2.22 x 0.36 in (18.2 x 56.5 x 9.0 mm)
- Weight: 0.268 oz (7.6 g)
- Maximum operating range: About 32.8 ft (10m) without obstacles (Optimum condition)

* The PC must have a USB port (Type A).

* Real Flight that can use WSC-1 as a USB interface is RF8 (update required for the final version) or later. It cannot be used with earlier products.

Usage precaution

⚠ 2.4GHz System Precautions

Please refrain from using it in places where the magnetic field, static electricity, or radio interference occurs from other companies' wireless devices that use 2.4 GHz or devices such as microwave ovens. (Radio waves may not reach depending on the environment.)

⚠ WARNING

⊘ Do not disassemble the WSC-1. Do not open the 1WSC-1 case.

- Opening the case may damage the PC board. In this case, PC assembly replacement or repair will become impossible. There is also the danger of fire and electric shock.

⊘ Do not expose the WSC-1 to water or other liquids. Do not touch the WSC-1 with your hands are wet.

- Water droplets entering the WSC-1 may cause trouble. There is also the danger of fire and electric shock.

⚠ CAUTION

⊘ Do not drop or expose the WSC-1 to strong shock. Do not set anything on top of the WSC-1.

- It may cause trouble.

⊘ Do not touch the connectors with your hands. Also, do not connect a dusty or dirty connector.

- It may cause trouble.

⚠ Handle the PC and peripheral devices in accordance with the instruction manual and cautions and warnings given in the instruction manual of each product.

Special Markings

Pay special attention to safety where indicated by the following marks:

⚠ WARNING

Procedures which may lead to a dangerous condition or cause death or serious injury to the user if not carried out properly or procedures where the probability of superficial injury or physical damage is high.

⚠ CAUTION

Procedures where the possibility of serious injury to the user is small, but there is a danger of injury, or physical damage, if not carried out properly.

⊘ Prohibited ⚠ Mandatory

Compliance Information Statement (for U.S.A.)

This device, trade name Futaba Corporation, model number WSC-1, complies with part15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
 - (2) This device must accept any interference received, including interference that may cause undesired operation.
- The responsible party of this device compliance is: FUTABA Corporation of America
2681 Wall Triana Hwy Huntsville, AL 35824, U.S.A.
Phone: 1-256-461-9399 FAX: 1-256-461-1059
E-mail: service@futabaUSA.com

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Compliance Information Statement (for Canada)

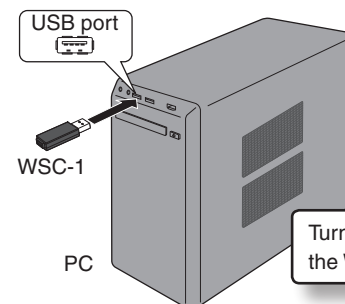
CAN ICES-3(B)/NMB-3(B)

Compliance Information Statement (for EU)

Declaration of Conformity

Hereby, Futaba Corporation declares that the radio equipment type WSC-1 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <http://www.rc.futaba.co.jp/english/dl/declarations.html>

低功率射頻器材技術規範 3.8.2 警語
取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前述合法通信，指依電信管理法規作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。



Turn on the power of the PC and connect the WSC-1 to the USB port of the PC.

⚙ Setting up a device
We're setting up 'WSC-1'.

⚙ Device is ready
'WSC-1' is set up and ready to go.

A setup complete message will be displayed and automatically recognized.

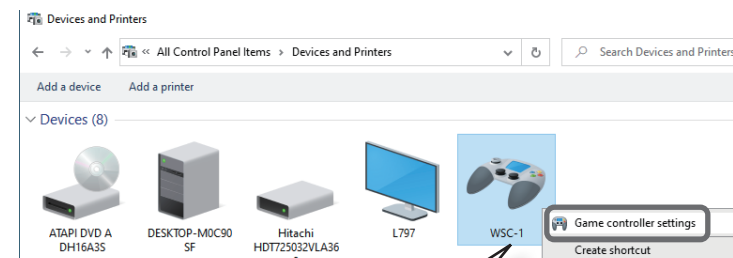
Checking WSC-1 on Windows®

• For Windows 10

Click the "Start" button --> "Windows System" --> "Control Panel (icon display)" --> "Devices and Printers" to display the "Devices and Printers" screen.

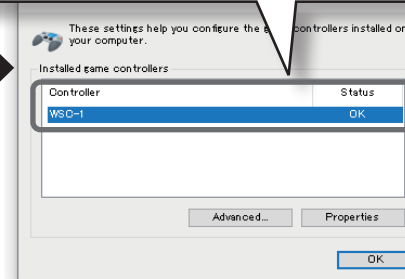
• For Windows 8.1

Right-click the "Start" button --> click "Control Panel (icon display)" --> "Devices and Printers" to display the "Devices and Printers" screen.



Right-click the game controller icon (WSC-1) and click "Game Controller Settings" in the displayed menu.

If it is recognized normally, "WSC-1" is displayed on the controller (it may be displayed as 8-axis 0 button), and the status is displayed as "OK".



Link to the transmitter

Use the link button to link with the transmitter of the S-FHSS 2.4GHz system to be used.

- * When operating the link, bring the transmitter within 8 inches.

1 Bring the transmitter and the receiver close to each other, within 8 inches (0.2 meter).

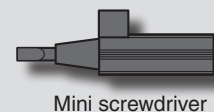
2 Turn on the transmitter.

3 Check the LED display on the WSC-1.

- * The LED flashes green.

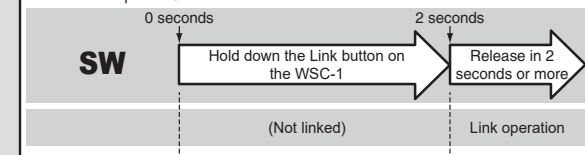
* If the LED lights up in green at this point, the link operation has already been completed, so the following operation is not necessary.

4 Press the link switch of WSC-1 with the attached mini screwdriver, and release it when the LED changes to blink red. Reading is complete when the LED turns green.



About WSC-1 link operation

Transmitter power ON status



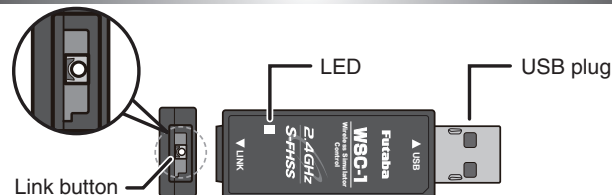
- * When operating the link, bring the transmitter within 8 inches.

* If another S-FHSS 2.4GHz system is used around you when operating the link, it may link with one of those transmitters. Therefore, be sure to check the operation after the link operation is completed.

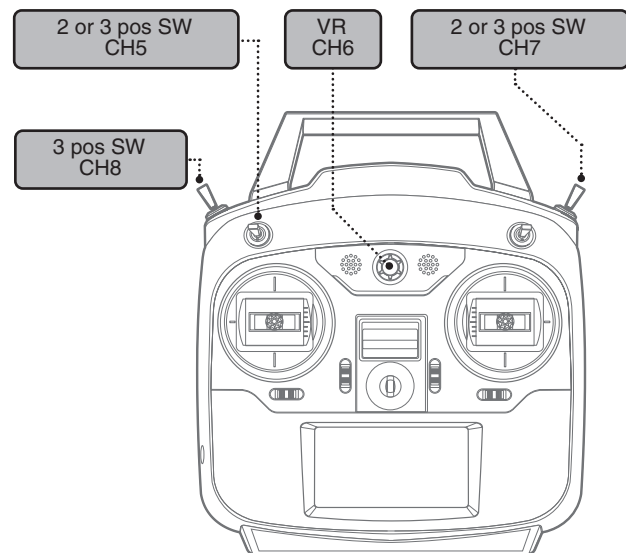
LED Indication

Green	Red	Status
Off	Solid	No signal reception
Solid	Off	Receiving signals
Off	Blink	When the link button is pressed
Blink	Off	Receiving signals but ID is unmatched
Alternate blink		Unrecoverable error (Memory, etc.)

Connecting the WSC-1



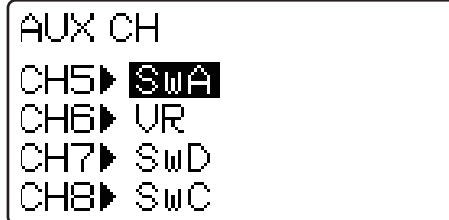
Transmitter settings



S-FHSS 2.4GHz system When using the Futaba transmitter as a substitute for the real flight InterLink Controller, set the SW / VR functions of the transmitter after CH5 as shown in the figure.

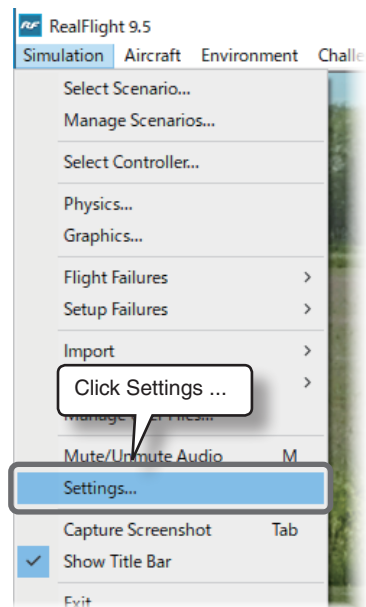
Example For T6K
Set SW / VR with the AUX CH (AUX channel) function.

T6K AUX CH function screen



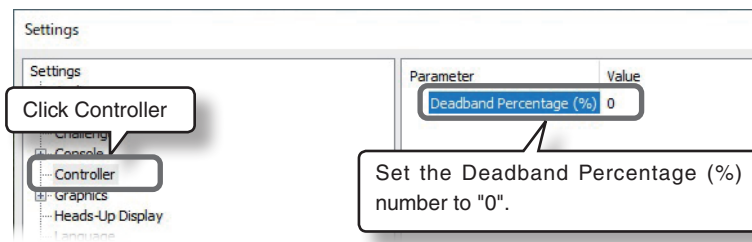
* For details on how to set SW / VR, read the instruction manual of the transmitter you are using.

Controller dead band setting



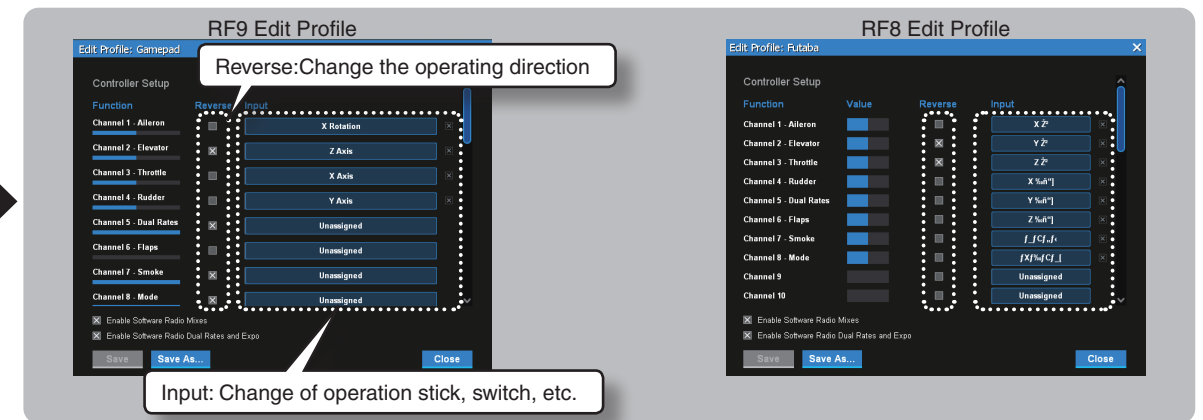
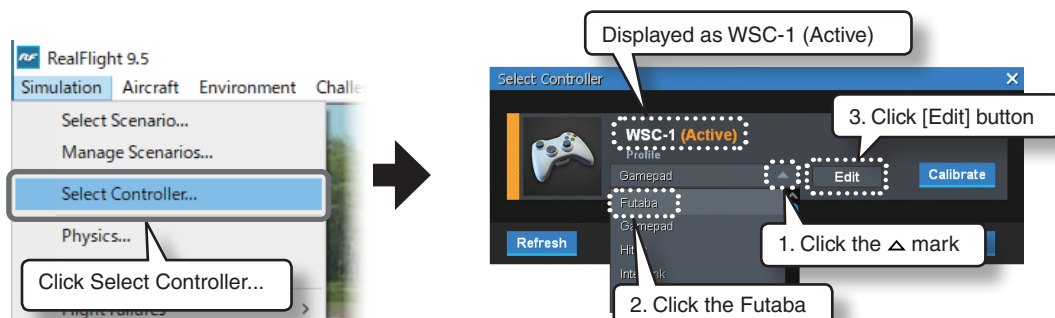
When using the S-FHSS 2.4GHz system Futaba transmitter with WSC-1 as a controller for the RealFlight application, set the Deadband Percentage (%) value of the Controller option of the RealFlight application to "0" to eliminate dead bands. As needed.

- 1 Start the Real Flight application.
- 2 Select "Settings ..." from the Simulation menu to display the settings screen.
- 3 Click Controller on the Settings screen to display the settings menu on the right side of the screen.
- 4 Set the Deadband Percentage (%) value to "0".



Controller settings

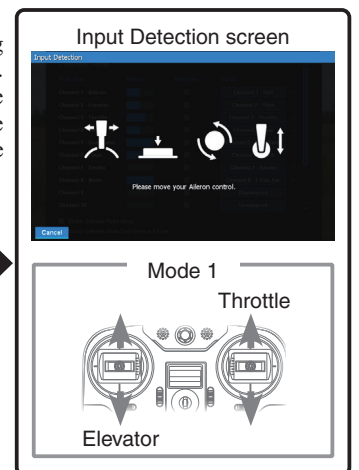
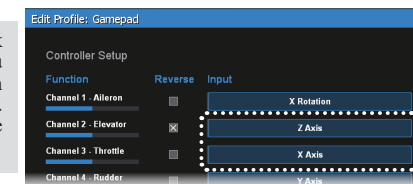
To use it as a real flight controller, register the Futaba transmitter by following the steps below.



Input (Example Mode change: Mode 2 to Mode 1)

When changing the stick movement from mode 2 to mode 1, first change the operating axis of the elevator channel. Channel 2 -Elevator Click Input at the far right of the display. The Input Detection screen will be displayed. Operate the elevator stick in mode 2 of the transmitter. When the elevator settings are complete, you will be returned to the Edit Profile screen. Then perform the same operation on the throttle side. This completes the mode change.

For RF9 and later versions, do not click Input for channels after Channel 7. If you click it, either the smoke ON / OFF switch or the throttle hold switch will not operate. If you click it, do not save it, close the screen, and try again.

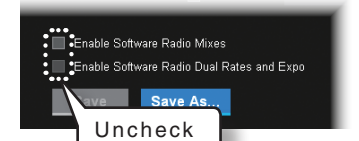


Reverse

If you need to change the direction of operation by operating a stick, switch, etc., click the check box of Reverse to add or remove the mark.

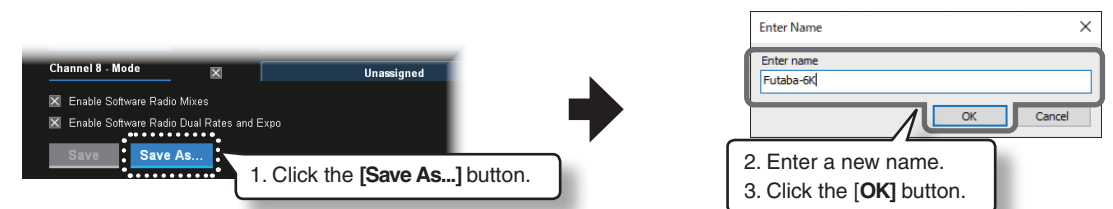
If you use mixing, dual rate, expo programmed on your radio.

- ☐ Enable Software Radio Mixes -----OFF
 - ☐ Enable Software Radio Dual Rates and Expo -----OFF
- *In this case, SW / VR is not set using the AUX CH (AUX channel) function of the transmitter.
*For detailed explanation, please read the instruction manual of RF8 / 9.



Save As...

After making changes to your controller profile, you will want to save all modifications. Note that you cannot make changes to stock profiles that are included with RealFlight. Click the [Save As] button to save the profile under a different name.



Calibration

It is necessary to calibrate the stick neutral position and operating range of the transmitter with [Calibration]. For details, please read the instruction manual of RF8 / 9.

<When requesting repair>

Reread manual before requesting a repair. If the problem continues, contact your local Futaba dealer.



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